

Basin Study Work Group: Crooked River Subgroup Meeting

January 29, 1:00– 3:30 pm
Prineville City Hall, 387 NE 3rd St, Prineville, OR 97754

ATTENDANCE

Dan Bruce, Terrebonne Water District
Chris Gannon, Crooked River Watershed
Council
Jeremy Giffen, Oregon Water Resources
Department
Nancy Gilbert, U.S. Fish and Wildlife Service
Brett Golden, Deschutes River Conservancy
Kyle Gorman, Oregon Water Resources
Department

Eric Klann, City of Prineville
Peter Lickwar, US Fish and Wildlife Service
Jeff Perreault, interested individual
Kimberly Priestley, WaterWatch of Oregon
Betty Roppe, City of Prineville
Bob Spateholts, Portland General Electric
Amy Stuart, Native Reintroduction Network
Rob Tanner, US Forest Service
Mike Tripp, Trout Unlimited

Kate Fitzpatrick of the Deschutes River Conservancy attended as the BSWG Process Co-Coordinator. Mary Orton of The Mary Orton Company facilitated the meeting.

AGENDA

The group used the following agenda as a guide during the meeting:

Subgroup Purpose: Recommend to the BSWG Steering Committee what should be included in the Plan of Study with regard to the Crooked River basin.

1. Welcome: Betty Roppe, Chair
2. Introductions
3. Overview and approval of agenda: Mary Orton, Facilitator
4. Action Items from last meeting
5. Crooked Task Table
 - Review comments from January 14 meeting; further discussion where needed
 - Review and agreement on Crooked Task Table
6. Next steps
 - Action items and parking lot
 - Report to BSWG
 - Next meeting of the Crooked Subgroup
 - Agenda for next meeting
7. Meeting evaluation
8. Adjourn

WELCOME, INTRODUCTIONS, AND OVERVIEW AND APPROVAL OF AGENDA

Betty welcomed everyone and asked for self-introductions. Mary reviewed the agenda; no changes were made.

SCHEDULE AND TIMELINE

Kate reviewed the schedule and timeline for development of the Plan of Study:

- Today: Develop agreement on CRS Task Table at a high level and record notes on details of the tasks, as offered by CRS members
- February 3: BSWG Steering Committee sees all Task Tables and potentially sends them back to the Subgroups if budget reductions are necessary.

- Before February 20: CRS will meet again as necessary.
- March 3: BSWG Steering Committee reviews refined Task Tables from all Subgroups.
- After March 3: Another review and refinement by CRS (and other Subgroups) as necessary.
- April 7: BSWG Steering Committee finalizes Plan of Study.

ACTION ITEMS FROM LAST MEETING

The action items were discussed as the group reviewed the Task Table, as follows:

- I. The group recommended that a smaller group with instream expertise work to refine and bring back to the group study questions and Plan of Study tasks and budgets related to the approved objectives. Volunteers were Brett Golden (offered to coordinate), Bonnie Lamb, Chris Gannon, Garry Sanders, Peter Lickwar, and Bob Spatcholts. Scott Carlon and Brett Hodgson were to be invited.
This group met and their recommendations were considered with the Task Table discussion.
- II. Kate Miller and Kimberley Priestley offered to send proposed language to accompany the following item in the options table, or a proposed way to treat it in the Plan of Study that they are comfortable with: “Release of uncontracted storage for fish and wildlife and groundwater mitigation (to be implemented as directed in H.R. 2460)”
Kimberley said that they just wanted it out of the list of options.
- III. Mike Kasberger and Kate Fitzpatrick will work together to refine costs and investigate potential match to phased piping in OID.
They have not had time to refine these costs since the last meeting two weeks ago. A draft budget is in the task table.
- IV. Kate Fitzpatrick agreed to talk with Mike Relf at Reclamation about the following topics:
 - A. Will MODSIM (or other model such as RiverWare) be updated as part of Reclamation’s process to implement the Crooked River legislation? Will water supply forecasting be improved through additional snotel sites or gages?
Reclamation is still figuring this out and we cannot count on it being completed by the time we might need it.
 - B. Is collecting new data allowable within a Basin Study?
If there is a justifiable need and group wants it, collecting new data can be paid for with the non-federal cost share part of the budget.
 - C. What levels of storage analysis are available and what is the cost of them?
The website for the Henrys Fork Basin Study is an example of a storage analysis. No costs have been identified yet.
 - D. How have other basin studies accounted for constraints associated with state water availability analyses when looking at storage options?
Mike did not know the answer.
 - E. Is there a possibility of considering modification of rule curves as part of a Basin Study?
While this is possible, the process is onerous.

CROOKED TASK TABLE

Kimberley noted that while she might agree that an individual item could be part of the Plan of Study, that does not indicate her organization’s support of that particular item. Specifically, she explained that she is not objecting to the task, “Evaluate off-channel storage opportunities (identify legal constraints first to guide analysis),” but that WaterWatch would oppose any new storage in the upper Crooked basin so they are not agreeing to implementation. The group discussed the fact that this was probably true for everyone, because before the evaluation is completed, they do not have enough information to know if they agree to implementation.

Each item on the draft Task Table (see Attachment 1) was reviewed by the group. All the changes below were **agreed to by consensus**. (Strike-through indicates language that was deleted, underline indicates language that was added.) Budget figures are included below only when they changed from the draft Task Table; otherwise, they stayed the same.

1.2	Evaluate, and update as necessary, water supply modeling; to be consistent with input from the sub-basin stakeholders. <u>Add a footnote regarding the uncertainty of Reclamation updating the model.</u>
2.3	To help refine instream demands, identify and implement <u>apply</u> an approach to evaluate year-round flow-temperature relationships in the Crooked River from Bowman Dam (72.8) to Osborne Canyon (14.1) and in Ochoco Creek from Ochoco Reservoir (10.4) to the mouth (0.0). <u>Add footnote: will Reclamation do part of this during their Crooked River legislation implementation?</u> <u>Switch the order of 2.2 and 2.3 on the task table.</u>
4.1	Evaluate water conservation and re-allocation options and packages of options/projects. Identify viable options for meeting the water supply needs for irrigation, instream and municipal/water suppliers. Identify legal and administrative requirements for option implementation.
4.1a	<u>Evaluate the feasibility and cost/benefit of</u> OID management opportunities with phased piping and optimization of leasing in OID.
4.1a' (new item)	<u>Document the existing instream leasing program, and potential improvements, as a supply option in the Basin Study.</u> <u>Budget: \$500 Reclamation/\$2,000 non-federal cost share partners.</u>
4.1b	Document cost-benefit of McKay Creek Switch.
4.1c	Document cost-benefit of OID diversion switch.
4.1d	Document cost-benefit of North Unit Water Supply Program.
4.1e	Document City of Prineville wetlands project and associated water quality/quantity benefits.
4.1f	Evaluate nonstructural storage opportunities. <u>Budget: \$10,000/\$10,000</u>

4.1g	Evaluate off-channel storage opportunities (identify legal constraints first to guide analysis) <u>Budget: \$1,000/\$6,000</u>
4.1h	Evaluate upland management as water supply opportunities (for e.g., juniper thinning).
4.1i	Evaluate structural modifications to better manage reservoir releases.
4.1j	Evaluate structural modifications to improve forecasting (snotel sites, gages).
4.1k	<u>Evaluate opportunities to increase</u> on-farm efficiencies (district and non-district).
4.1l	<u>Develop a</u> plan for water measurement at all points of diversion. <u>Budget: \$4,000/\$1,000</u>
4.1m	Evaluate additional legal constraints <u>not addressed under other options</u> (for e.g., modifying rule curves) <u>Budget: \$6,000/\$500</u>

During this discussion, all suggestions to add a detail to the Task Table were recorded, as follows. With the exception of the last item (see note there), these were captured but not discussed or agreed to.

1. Task 2: Note contents of Jonathan La Marche email to Kyle Gorman, January 29, 2015, Subject: Crooked River Model:

Kyle,

Here's a summary of my conversation with Jennifer regarding the Crooked River portion of the Riverware model.

- *It based on the same setup/logic as Leslie Stillwaters MODSIM model, but it operates on a daily time-step.*
- *It needs to be updated based on results from the seepage run but can also include the logic/components of Bob's spreadsheet model.*
- *It probably needs to be simplified with respect to the internal OIOperations. Leslie had a lot of infrastructure/operations details within OIbased on very little information.*
- *Ideally, the Riverware model would be used instead of Bob's model because it includes the Crooked River operations and tie in with NUID. In addition, it has much better capability of simulating implicit/explicit rules that the spreadsheet model. However, this doesn't preclude use of Bob's model for specific questions related to OI. Typically, the use of what model (what tool) is at the discretion of the primary investigator.*
- *Jennifer was very open to modify the Crooked portion of Riverware based on the groups input. I think she's already talked with OI(last year), but I could be mistaken.*

I think that's about it. The model needs to be updated. We can incorporate the operationally logic from Bob's model. It'd be good to use Riverware because Crooked operations are linked to Deschutes via NUID demand. Jennifer's open to modifying/improving the Crooked portion of the model.

2. Task 2.3: Go/no-go date needs to be paid attention to.
3. Task 2.3: Factor in projects (like 4.1.e, City of Prineville wetlands project) that will impact temperature.
4. HCP and Crooked River Collaborative Water Security and Jobs Act of 2014 should be referenced in Technical Report #4 or #2 as independent regulatory processes that will impact BSWG (though BSWG will not impact them).
5. Tasks 4.1.b and 4.1.c: Document both qualitative and quantitative costs and benefits.
6. Task 4.1.f: Include the Crooked River Action Plan here.
7. Task 4.1.f: What is the total capacity of non-structural sub-surface storage?
8. Task 4.1.f: Address legal constraints as appropriate.
9. Task 4.1.h: Include grazing and other activities.
10. Task 4.1.h: The Ochoco National Forest collaborative is also working on upland management.
11. Task 4.1.i: Address hydropower modifications and different release schedules.
12. Task 4.1.l: Prioritize points of diversion for future automated gaging.

NOTE: This is the only item that was discussed and agreed to by the full group (agreement was by consensus).

The meeting adjourned.

Attachment 1: Crooked River Collaborative Water Security and Jobs Act (Summary)

1. Modifies the Wild and Scenic River Boundary, allowing the installation of a hydroelectric turbine on Bowman Dam.
2. Provides the City of Prineville with 5100 af of mitigation water, allowing them to draw more groundwater to meet city's needs.
3. Provides contracted water to irrigators on a "first fill" basis, ensuring a more reliable supply of water to farmers.
4. Provides an additional 10,000 af of "first fill" water to the North Unit Irrigation District and other contract holders.
5. Directs Bureau of Reclamation (BOR) to release a sufficient amount of remaining stored quantities, as well as the 5100 af of Prineville water, to be released based on an annual release schedule developed with National Marine Fisheries Service and US Fish and Wildlife Service. The annual release schedule is developed to maximize benefits to fish and wildlife downstream of Bowman Dam.
6. Additionally directs the BOR to provide, to the maximum extent practicable, a minimum of 80 cfs of in-stream flows from Bowman Dam to Lake Billy Chinook.
7. Requires the BOR to project reservoir water levels over the course of the year and make those available to the public.
8. Allows members of Ochoco Irrigation District to make early repayment of construction costs of project facilities, and allows contract amendments to authorize the use of water for instream purposes for water conservation projects and temporary instream leasing.
9. Allows McKay Creek water users to enter into the Ochoco Irrigation District boundary and draw water from the Crooked River, providing them more reliable water supply, and enhancing habitat for fish in McKay Creek.
10. Establishes a Dry-Year Management Planning Process to convene stakeholders to evaluate voluntary measures to minimize drought impacts.

Attachment 2: November 12, 2014 Agreements of the Crooked River Subgroup

1. Refine Existing Water Supply

The group agreed by consensus that the Crooked River Subgroup recommends to the BSWG Steering Committee that the Plan of Study include budget for the Bureau of Reclamation to update the water supply modeling for the Crooked River, with involvement of the Crooked River Subgroup and requesting the involvement of Jonathan La Marche from OWRD. The Crooked River Subgroup will work with Reclamation to agree on assumptions and inputs.

(Purpose: Resolve the issues with the two existing models: MODSIM and that developed by Bob Main.)

2. Refine Instream Needs

The group agreed by consensus to the following priority objectives related to instream needs in the lower Crooked River:

1. Identify the conditions necessary for steelhead upstream and downstream migration to and from Ochoco and McKay Creeks and for those creeks to support all life stages of steelhead;
2. Identify the conditions necessary for steelhead upstream and downstream migration to the Crooked River between the Crooked River Feed Canal (RM 57.2) and the North Unit Pumps (RM 14.1) and for those reaches to support all life stages of steelhead ;

The group tasked several members to refine wording to include objectives for spring Chinook. The following objectives were circulated by email and received no comments.

3. Identify the conditions necessary for spring Chinook upstream and downstream migration to and from Ochoco Creek and for that creek to support all life stages of spring Chinook ; and,
4. Identify the conditions necessary for spring Chinook upstream and downstream migration to the Crooked River between Bowman Dam (RM 70) and the North Unit Pumps (RM 14.1) and for those reaches to support all life stages of spring Chinook.

Attachment 3: Draft Structural & Nonstructural Options to Improve Water Supply

Action	Benefit	Existing Information	Information Needed	Estimated Cost
Release of uncontracted storage for fish and wildlife and groundwater mitigation (to be implemented as directed in H.R. 2460)	Instream flows; muni		*None. To be implemented as directed by H.R. 2460	zero
Instream leasing	Instream; ag	Ten years experience with the program	Analysis of policies/pricing to optimize	low
McKay Creek water rights switch	instream; ag	Sufficient	*	zero
City of Prineville Wetlands	instream; muni; public	Sufficient; project designed and funded	*	zero
NUID Water Supply Program	muni; ag; instream	Project ongoing; pilot mitigation project in process	Information from Deschutes district plans will add value	zero
Move OID diversion downstream	instream; ag	Feasibility engineering and cost analysis	*	zero
Pipe OID system & protect conserved water instream	instream; ag	System Optimization Review	cost-benefit by phases	low
New storage: structural	instream; ag; muni		Analysis of enhancing existing storage; new sites	low-med?
New storage: nonstructural (i.e., enhancing wetland and floodplain capacity)	instream; ag; muni	CRWC plans or emerging plans in McKay Creek and lower Crooked River?	*?	
Assessment of Legal/policy barriers	all	Most barriers known and identified	documentation; further analysis?	low

**Where information is not needed, we may just need a review of existing plans and incorporation of actions into tradeoff analyses.*